

Dear FCC:

I am afraid that you might react too harshly when it comes to regulation of amateur radio bandwidth. I believe that many commercial radios of both the present and past, when unmodified and in proper working order, meet the bandwidth requirements that are necessary to prevent interference. Some newer models, I have heard, have adjustable bandwidth filters that can be set to levels incompatible with the high-frequency phone bands.

There are many amateurs that design and build their own equipment (like myself), and could be severely affected by any ruling that the FCC might make. I like to design QRP (low power) single-sideband radios with four-element crystal ladder filters, then build them and test them on the HF bands. If filter requirements become too strict, even for low-power radios, then a point might come when the filter is larger (physically) than the rest of the radio.

I think that this debate can be solved to the satisfaction of all amateur radio operators--both experimenters, contesters, and rag-chewers. I therefore suggest that you consider the following ideas:

- (1) Grandfather all commercial and kit radios (ICOM, Heathkit, etc.) of reasonable design and in good operating order that were manufactured (or assembled) before some current date (say July 15, 2003).
- (2) Require operators of radios with adjustable bandwidth to set them at some specified bandwidth (say 2.8 KHz or less).
- (3) Set bandwidth limits for power levels--150 watts to 1500 watts might allow 2.8 KHz; 15 watts to 150 watts might allow 3.0 KHz; 1.5 watts to 15 watts might allow 4.0 KHz; and power levels below 1.5 watts might allow 5 KHz. This would let experimenters test their designs and modifications at levels that would result in less interference.

If these three steps were implemented without creating elaborate new technical standards, I believe that 98% of interference would be eliminated. Intentional interference is another matter.

I believe that many of the older kit radios, when properly tuned and in good working order, have bandwidths of much less than 2.8 KHz. Many modern commercial radios, especially those with ceramic filters, likely have bandwidths at or near 2.8 KHz. QRP radios of both commercial and homebrew design could easily meet bandwidth requirements at lower power levels if the FCC would allow slightly wider emissions than 2.8 KHz.

I have heard that some modern radios actually have spectrum analyzers built in to their design. I can imagine the comments given by their owners when they hear a signal that is too wide. Their feedback could go a long way toward educating people about the emissions of their favorite radio(s).

It is not necessary to have broadcast quality bandwidth at 1500 watts, but it might be OK to experiment with the same bandwidth at 1.5 watts. The intent should not be to show off one's radio at 300 miles, but to gain skills and knowledge of the designs and workings of electronic communication circuits.

Please consider what I have written. I do not want the amateur radio bands to become a "commercial channelized two-way system in a box," and neither do I want it to produce chaos and discord. Hopefully, there is some intermediate level of

regulation that will correct the problem of interference in the HF amateur radio bands.

Sincerely yours,

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